Claims

1. A combined transformer including transformer chamber, LV chamber, HV chamber and radiator, characterized in that: the radiator has hollow heat pipe in which heat transferring medium is filled, the one end of the heat pipe is inserted into the transformer oil in the transformer chamber, while the other end thereof is provided with radiating fins; the combined transformer is a double-layer structure in upper and lower layer arrangement.

2. The combined transformer of claim 1, wherein the half of the double-layer structure is buried underground.

3. The combined transformer of claim 1 or 2, wherein the LV chamber is located at the upper layer, the transformer chamber and HV chamber are at the lower layer, and the HV chamber is set beside the transformer chamber.

4. The combined transformer of claim 3, wherein the transformer chamber and HV chamber are buried underground.

5. The combined transformer of claim 4, wherein the radiating fins are set above the transformer chamber.

6. The combined transformer of claim 4, wherein the transformer chamber on its side includes traditional liquid radiating fins.

7. The combined transformer of claim 4, wherein the transformer chamber is a sealed box in which transformer, transformer oil, protective fuse, HV load switch and tap switch are installed, a pressure relief valve of the box is set at the side wall of the box.

8. The combined transformer of claim 4, wherein the LV chamber has a door and an underground cable entry, in the LV chamber is LV outgoing terminal, LV switch, oil temperature meter and oil level meter.

9. The combined transformer of claim 4 features: HV cable socket and HV cable entry are set in the HV chamber.

10. The combined transformer of claim 8 or claim 9 features: In the LV or HV chamber are socket for protective fuse, operation handle for HV load

switch and regulating handle for tap switch.

11. The combined transformer of claim 4, wherein an insulation layer is set in the LV chamber at the bottom close to the transformer chamber.

12. A prefabricated substation including transformer chamber and transformer installed in the transformer chamber, switch room in which LV and HV chambers are set, radiator, characterized in that: the radiator has hollow heat pipe in which heat transferring medium is filled, one end of the heat pipe is inserted into the transformer oil in the transformer chamber, while the other end thereof is provided with radiating fins; the radiating fins are at outer side of the switch room; the prefabricated substation is a double-layer structure in upper and lower layer arrangement.

13. The prefabricated substation of claim 12, wherein the double layer structure is buried underground.

14. The prefabricated substation of claim 12 or claim 13, wherein the switch room is set above the transformer chamber.

15. The prefabricated substation of claim 14, wherein the transformer chamber is buried underground.

16. The prefabricated substation of claim 14, wherein the transformer chamber is enclosed with ground pit and cover plate.

17. The prefabricated substation of claim 16, wherein a cable entry opening is set at the side of the ground pit.

18. The prefabricated substation of claim 17, wherein the ground pit is made of concrete, and the cover plate is made of steel plate.

19. The prefabricated substation of claim 14, wherein the transformer is oil-immersed transformer, waterproof cable is used for the connection between transformer HV & LV terminals and HV & LV chambers, and a waterproof socket shall be used for cable gland.